



XESS ION 5120

Lithium Battery Storage



Featuring cutting-edge **Active Battery Management** and **World Class LiFePo4 Prismatic Cells**, the ION 5120 is a robust energy storage solution designed for the toughest of Australian conditions.

Future proof with effortless expandability thanks to our **Plug-and-Play Cabinets**, and enjoy the confidence of uninterrupted performance with an industry first **Automatic Fallback to Self-Management** if comms are lost (when used with the XESS ONE).



Easy to Connect

Managed or Self-Managed Operating Modes.



Scalable

Up to 64 Battery Modules in parallel.



Hot Swappable

Easy swapped without system interruption.



Reliability

Automatic Fallback to Self-Managed if comms are lost.
(when used with the XESS ONE)



LiFePO4

LiFePO4 chemistry housed in a robust Prismatic Cell construction.



Easy Installation

Easy installation with quick plug-and-play connections saving time on site.



Pre-wired Cabinets

Choose from 6 or 10 battery module pre-wired cabinets.



Remote Monitoring

Performance and system management through XESS LINK.



Warranty

Up to a 10-year 70% product and performance warranty.
(Conditions Apply)

XESS Energy

📍 2/75 Bluestone Circuit, Seventeen Mile Rocks, QLD
✉ sales@xess.energy
🌐 www.xess.energy

XESS ION Specification REV 004 - 20th May 2024
Copyright © 2024 XESS Energy Pty. Ltd. All Rights Reserved.

Powered by
Great Power

Parameter	Battery Specifications
Part Number	XESSION-5120
Nominal Voltage	51.2 V DC
Operational Voltage Range	40.8 V DC to 58.4 V DC
Capacity	5.12 kWh / 100 Ah
Depth of Discharge	Up to 100%
Maximum Continuous Discharge Rate	1C (@ 25°C)
Maximum Continuous Discharge Current	100 A (@ 25°C)
Maximum Discharge Power	5.12 kW
Peak Discharge Current	200 A (10.24 kW, 5s)
Maximum Continuous Charge C-Rate	1C (@ 25°C)
Maximum Continuous Charge Current	100 A (@ 25°C)
Peak Charge Current	200 A (@ 25°C)
Integrated Circuit Breaker	1-Pole 125A 80VDC
Lithium Chemistry	LiFePO4 / LFP
Cell Construction	Prismatic
Operating Temperature Range Managed	Charge: -10°C to 50°C / Discharge -20°C to 50°C
Operating Temperature Range Self-Managed	Charge: 0°C to 50°C / Discharge -5°C to 50°C
Operating Humidity	Up to 95% (non-condensing)
BMS Over-Voltage Cell Level Protection	3.65 V DC
BMS Under-Voltage Cell Level Protection	2.55 V DC
BMS Over-Temp Cut Off	56°C
Short Circuit Current	4500 A
Arc Flash Incident Energy IEm in Cal/cm2 (45cm)	0.341
Arc Flash Incident Energy AFB (cm)	23.952
Altitude	< 2500 m
DC Connectors	100 A Quick Connect
IP Rating	IP40
Efficiency	> 96%
Cooling	Natural Convection
Scalability	64 Batteries in Parallel
Series Connection	Not Permitted
Communications	CAN 2.0A / RS458 / No Comms
Weight	44 kg
Dimensions	440 x 134 x 480 mm
Warranty	7 + 3 Years (up to 10 Years) - Conditions Apply
Certifications - Cell	UL1973, UL9540A, IEC62619:2022, UN38.3
Certifications - Pack	IEC62619:2022, IEC62040, UN38.3, CE

Parameter	Cabinet Specifications	
Part Number	XESSION-CAB6	XESSION-CAB10
Dimensions (W x D x H)	620 x 600 x 1270 mm	620 X 600 x 1890 mm
Fixing	4 x Wheels & 4 x Feet	
Max. Module Quantity	6 (30.72 KW)	10 (51.20 KW)
Busbar Continuous Current Rating	625 A	1250 A
Battery Interconnection	Pre-wired Quick Connector with 4 AWG UL Cable	
DC Circuit Breaker	None	None
IP Rating	IP20	
Weight	91 kg	128 kg
Warranty	Refer to Warranty Document	

XESS Energy reserves the right to change any product, product specifications and data without notice to improve reliability, function, or design or otherwise.